REMARKS/ARGUMENTS

In response to the Office Action dated November 6, 2009, Applicants amend their application and request reconsideration. No claims are added or cancelled so that claims 1-14 remain pending.

In this Amendment claim 1, the sole independent claim, has been amended to describe the invention disclosed in the patent application more precisely. The remaining claims have been amended to be consistent with amended claim 1.

The invention is directed to a local communications network providing communication with mobile terminals, such as cellular telephones, through relay antennas. The network is simplified, compared to prior art networks, by providing a wireless transmission link that connects the relay antenna to a fixed radio frequency base station. In conventional systems the connection from the relay antenna to the fixed base station has been via coaxial cable. The coaxial cable connection entails substantial expense in installation, principally attributable to the cost of materials, their transportation, and the labor for installing the coaxial cable connection. Of course, the requirement of making the mechanical connection from the relay antenna to the fixed base station imposes additional physical constraints on where the relay antenna may be located relative to the fixed base station. See the patent application as filed at paragraph [0002].

These problems are solved in the invention by providing a wireless radio frequency transmission link from the relay antenna to a fixed radio frequency base station. Of course, the base station is not simply a base station, but a radio frequency base station because that base station itself must operate at radio frequencies to receive the transmission from the relay antenna. This arrangement is shown in Figure 1 of the patent application and described throughout the specification. See, especially paragraphs [0015] – [0017] of the patent application as filed.

The interposition of this radio frequency transmission link between the relay antenna and the fixed radio frequency base station necessitates some further signal processing before the transmitted signals and the information that they carry reaches

the base station. This further signal processing is described in the patent application, particularly with respect to Figures 2-4, in paragraphs [0018] – [0026]. Figures 6 and 7 illustrate the siting advantages that flow from the invention as described at paragraphs [0027] and [0028] of the patent application as filed.

Claim 11 has been amended and reformatted to make clear that the wireless radio frequency transmission link provides the communication to the base station from the relay antenna that would otherwise be provided by coaxial cable. This clarifying amendment makes clear that the link is between the fixed base station, referred to in the patent application as the combination of a radio communication station 7, which is usually referred to as a base station controller, and a communication center, usually referred to as a mobile switching center, which provides the interface with a land line telephone system. See paragraphs [0015] and [0017] and Figure 1 of the patent application. Getting rid of the conventional coaxial cable connection means that there is no intervening coaxial cable or similar wired connection between the relay antenna and the base station, as explained in amended claim 1 and the cited portions of the specification.

Examined claims 1-5 and 9 were rejected as anticipated by Schmutz (Published US patent application 2001/0031624). Examined claims 6-8 and 10-14 were rejected as obvious over Schmutz in view of Baker et al. (Published US patent application 2003/0232595, hereafter "Baker"). These rejections are respectfully traversed as to the claims now pending.

Both prior art rejections depend on whether Schmutz anticipates claim 1, the sole independent claim. The rejection of claims 6-8 and 10-14 presumes that anticipation. If there is no such anticipation, then both rejections must be withdrawn. For that reason, only the rejection of claim 1 is discussed here. In addition, the difference between the invention as defined by amended claim 1 and Schmutz is not supplied by Baker.

In relying on Schmutz, the Examiner directed attention to its Figure 1. That figure depicts a system in which cellular telephones 18 communicate with a respective one of a plurality of translator repeater stations 12. Those translator repeater stations,

in turn, communicate over respective wireless links 19 with respective base transceiver stations 15. Those base transceiver stations all communicate with a single fixed base station controller 17 over wired, i.e., coaxial cable, connections. The Schmutz system is unlike the system defined by claim 1 because there is an intervening wired connection between the fixed base station and the relay antennas. Because of that connection, the problems associated with the prior art that are solved in the invention are neither addressed by nor solved by Schmutz. Schmutz must still contend with the installation, transportation, and siting problems of coaxial cable installations. A wired connection is an essential part of the communication between the base station and the relay antennas of Schmutz.

Since anticipation requires that a prior art publication disclose all of the elements of a claimed invention and Schmutz does not meet that stringent test, the rejection cannot properly be maintained. It follows that the rejections of claims 2-14 likewise cannot be maintained. Further, Applicants point out that the invention, as claimed, cannot even be obvious over Schmutz, regardless of Baker. Schmutz is dedicated to providing only an intermediate wireless link in the direction of the base station, not an entirely wireless link. Schmutz requires a repeater system that attempts to make more uniform the power levels of the signals transmitted to the intermediate base transceiver stations from the various cellular telephones through the repeaters. This function presumes an absence of a direct wireless communication to the base station including the base station controller. Likewise, the focus of Baker is the provision of the repeater stations with adjustable amplifications to balance the power levels of outgoing signals. Therefore, Baker could not direct the person of skill in the art toward the invention that is disclosed and claimed in the present patent application.

Reconsideration, withdrawal of the rejections, and allowance of claims 1-14 are earnestly solicited.

Respectfully submitted,

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